

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**FOIL when  $A \neq 1$  SLTN (version 127)**

**FOIL the expressions shown below:**

1.  $(-7x - 7)(-4x + 6)$

$$\begin{aligned} &(-7)(-4)x^2 + (-7)(6)x + (-7)(-4)x + (-7)(6) \\ &(28)x^2 + (-42)x + (28)x + (-42) \\ &28x^2 - 14x - 42 \end{aligned}$$

2.  $(2x - 7)(8x - 4)$

$$\begin{aligned} &(2)(8)x^2 + (2)(-4)x + (-7)(8)x + (-7)(-4) \\ &(16)x^2 + (-8)x + (-56)x + (28) \\ &16x^2 - 64x + 28 \end{aligned}$$

3.  $(7x + 2)(8x - 8)$

$$\begin{aligned} &(7)(8)x^2 + (7)(-8)x + (2)(8)x + (2)(-8) \\ &(56)x^2 + (-56)x + (16)x + (-16) \\ &56x^2 - 40x - 16 \end{aligned}$$

4.  $(7x + 4)(-5x - 3)$

$$\begin{aligned} &(7)(-5)x^2 + (7)(-3)x + (4)(-5)x + (4)(-3) \\ &(-35)x^2 + (-21)x + (-20)x + (-12) \\ &-35x^2 - 41x - 12 \end{aligned}$$

5.  $(-5x - 2)(2x + 3)$

$$\begin{aligned} &(-5)(2)x^2 + (-5)(3)x + (-2)(2)x + (-2)(3) \\ &(-10)x^2 + (-15)x + (-4)x + (-6) \\ &-10x^2 - 19x - 6 \end{aligned}$$

**FOIL the expressions shown below:**

6.  $(-5x - 9)(-8x + 6)$

$$\begin{aligned} &(-5)(-8)x^2 + (-5)(6)x + (-9)(-8)x + (-9)(6) \\ &(40)x^2 + (-30)x + (72)x + (-54) \\ &40x^2 + 42x - 54 \end{aligned}$$

7.  $(3x - 7)(-2x - 7)$

$$\begin{aligned} &(3)(-2)x^2 + (3)(-7)x + (-7)(-2)x + (-7)(-7) \\ &(-6)x^2 + (-21)x + (14)x + (49) \\ &-6x^2 - 7x + 49 \end{aligned}$$

8.  $(8x + 5)(7x - 6)$

$$\begin{aligned} &(8)(7)x^2 + (8)(-6)x + (5)(7)x + (5)(-6) \\ &(56)x^2 + (-48)x + (35)x + (-30) \\ &56x^2 - 13x - 30 \end{aligned}$$

9.  $(6x - 9)(5x + 7)$

$$\begin{aligned} &(6)(5)x^2 + (6)(7)x + (-9)(5)x + (-9)(7) \\ &(30)x^2 + (42)x + (-45)x + (-63) \\ &30x^2 - 3x - 63 \end{aligned}$$

10.  $(-3x - 3)(-2x + 9)$

$$\begin{aligned} &(-3)(-2)x^2 + (-3)(9)x + (-3)(-2)x + (-3)(9) \\ &(6)x^2 + (-27)x + (6)x + (-27) \\ &6x^2 - 21x - 27 \end{aligned}$$